

limits of the electric nervo-muscular sensibility, refused to make a trial of their mechanical power, as determined by the dynamometer.

I had made similar experiments in former years, and it gives me pleasure to be able to add that they are in harmony with nature's arrangement. Thus, in my investigations which were published in the *Comptes Rendus* of the Academy of Sciences of Paris, for 1852, I met with this co-relation, *viz*: in the exhaustion of the mechanical power being accompanied by the exhaustion of the electrical force; and, conversely, in the increase of mechanical power being always accompanied by that of the electric force. I have not, however, determined as yet, in degrees, the relative amount of this exhaustion and increase.

By the apparatus of Dubois Raymond, we obtain, at length the *sharp in fa* of the tonic 524, which gives 728 compound, or 1456 simple vibrations, representing the number of magnetizings and their withdrawals or abstractions in a second of time. Temporary magnetizings, however, coupled with acoustics, may form a powerful means of measuring the minutest fractions of time, the like of which is not procured from common pendulums. We wait impatiently for the apparatus of the ingenious mechanician Hipp, of Berne.

The reporter for the Proceedings of the Society laid upon the table No. 58, recently published.

The unfinished business of the last stated meeting being under consideration, it was agreed that a Committee of seven members shall be appointed by the presiding officer, to revise the laws of the Society relative to the duties of Treasurer and Librarian.

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*Stated Meeting, March 19.*

Present, twenty members.

The Vice-Presidents being absent, Dr. WILLIAM HARRIS was called to the chair.

Letters were read:—

From the Horticultural Society of London, dated February 2, 1858, returning thanks for Vol. XI. Part 1, of the Transactions of this Society:—

From the Connecticut Historical Society, dated Hartford,

March 11, 1858:—from the Corporation of Harvard College, dated Cambridge, March 11, 1858:—and from the American Antiquarian Society, dated March 12, 1858, severally acknowledging the receipt of No. 58 of the Proceedings.

The following donations were announced:—

FOR THE LIBRARY.

Catalogue des livres composant la Bibliothèque Scientifique du feu M. Alexandre Brongniart. Paris, 1858. 8vo.—*From the Librarian of the Institute.*

Report of the Superintendent of the United States Coast Survey for 1856. Washington. 4to.—*From Prof. A. D. Bache, Superintendent.*

Journal of the Franklin Institute. Third Series. Vol. XXXV. No. 3. March, 1858. Philadelphia. 8vo.—*From the Institute.*

Second Annual Report of the M'Kean and Elk Land and Improvement Company, 1858. Philadelphia. 8vo.—*From the Company.*

Description of New Organic Remains from north-eastern Kansas, indicating the existence of Permian rocks in that territory. (Proc. Alb. Inst. March 2, 1858.) By F. B. Meek and F. V. Hayden, M.D.—*From the Albany Institute.*

Remains of Domestic Animals discovered among Post Pliocene Fossils in South Carolina. By Francis S. Holmes, A.M. With letters from Profs. Leidy and Agassiz. Charleston, 1858. 8vo.—*From the Author.*

The Principles of Social Science. By Henry C. Carey. In three volumes. Vol. I. Philadelphia, 1858. 8vo.—*From the Author.*

The African Repository. Vol. XXIV. No. 3. March, 1858. Washington. 8vo.—*From the Am. Colonization Society.*

Reminiscences of Carpenters' Hall. Philadelphia, 1858. 8vo.—*From the Carpenters' Company.*

Mr. Colwell, pursuant to appointment, read an obituary memoir of Mr. Isaac R. Davis, a deceased member of the Society.

Isaac R. Davis, whose loss we now deplore, departed this life on the 4th of February, 1857. He was born in the year 1809, in the County of Montgomery, in the State of Pennsylvania. Evan Davis, his father, was a respectable member of the Society of Friends. His early education was received at a Friends' school in West Town, Chester County. He was at an early age apprenticed to a merchant

in Philadelphia, and duly fulfilled his duties in that position to the end of the time. He soon after occupied a very responsible station in one of the largest mercantile establishments in the city; and became subsequently a partner in the firm, in which he continued to the time of his decease. In this concern, which wields a large business and a large capital, Mr. Davis found scope for his talents as a man of business, and for his usefulness as a wise and good citizen. He will not be forgotten in either capacity by those who were brought into close relation with him: and especially will he be remembered by those who were capable of comprehending a character so finely balanced, and a mind so well endowed.

Mr. Davis was eminently a man of business. No one in the community stood higher as such. He exemplified the truth, that moral and intellectual qualities and powers of a high order are not wasted, nor their value diminished, by being united in a merchant or manufacturer. It may be true that such occupations are not so well fitted to excite and improve the higher powers of the mind, but if so, it is because the conceptions ordinarily formed of the purpose and conduct of business falls below the proper standard. There is not a business, not a station of life, which may not be ennobled by a man of high honour and great abilities. Mr. Davis was precisely of the mould to become an example in that respect. His mind was of that clear, discriminating cast, which enabled him to comprehend his position in business, in society, and in the body politic, to perceive and distinguish between the claims thus made upon him. His intellect was well balanced and his character and conduct equally so. His mind sunk into no mere channel of routine, it did not become inactive for want of stimulus. His powers of observation, strong and pervading, suffered no subject or process to lose its interest by familiarity, and thus escape fresh and constant investigation. His views of business, of the claims of society, and of the working of the social system around him, were therefore even enlarging. His physical were far below his mental capacities, yet until struck down by paralysis, he never faltered nor hesitated to exact from his body whatever his mind required.

The points of contact between a man of his order of mind and a mind of similar power, devoted chiefly to science or philosophy, are not few. The progress of knowledge and science is such, that every department of business has its interests in and its relations with this progress; the mind that has any philosophic tendencies is now constantly invited to exert and apply them. Mr. Davis belonged to a

class, which, though as yet not numerous, is increasing, which looks upon the whole field of daily business with an eye to its improvement, not only by better methods, but by an application of all accessible and available knowledge. The man whose mind is thus awakened must rapidly attain an enlargement of his faculties and comprehension, which cannot fail to be visible, and to be marked with beneficial results, private and public. It is in this direction that we are to look for the progress of the highest proofs and benefits of civilization, as it pervades the masses of men who do the business of the world and who perform its labour. In this important path of such vital interest to human welfare, we find Mr. Davis conspicuous. It is this which establishes a legitimate connection between him and the American Philosophical Society, which is ever willing to extend the hand of fellowship to the philosophic mind, in whatever department of life it may be found.

Mr. Davis occupied a high position in this community as a merchant and as a manufacturer, but not without a full appreciation of the advantages and duties of such a position. While private interests were earnestly and industriously promoted, questions of public concern never failed to draw his attention in proportion to their importance. He was ever ready to give the benefit of his strong common sense, and his clear discrimination, to any measure which promised public advantage. Although he constantly declined office, he regarded public affairs with an interest scarcely less than he gave to his private business. It is well known to those who knew Mr. Davis best, that few men not in public life exerted a wider influence in public affairs. This involved an extensive and frequently elaborate correspondence, from the labour of which he never shrunk when a good end was in view. This influence was due chiefly to his clear views of public questions, and that knowledge of men and their motives which made him a safe and valuable adviser for men in responsible stations.

Mr. Dunlap was excused from preparing an obituary notice of the late Dr. Nathaniel Chapman, and Dr. J. B. Biddle was appointed to perform that duty.

Mr. Dunlap and Dr. Biddle were appointed in the place of the deceased members of the Committee to procure a portrait of Dr. Chapman.

Judge King called the attention of the Society to the present condition of the negotiation with the Government of the United

States for the sale of the Hall of the Society, and to the delay of the government official authorities in carrying into effect the articles of agreement entered into for such sale:

Whereupon, after some discussion of the subject, the following resolution, offered by Mr. Foulke, was read, considered and agreed to:—

*Resolved*, That Judge King be added to the Committee on the sale of the Hall, and that the Committee be authorized to take such proceedings as they may deem expedient to secure an early settlement of the negotiation respecting the proposed sale to the government.

A resolution was offered by Dr. Morris, as follows:

*Resolved*, That a Committee be appointed to confer with the Philadelphia Library Company, and the College of Physicians, on the subject of buildings for the accommodation of the respective bodies:

Which resolution was postponed for consideration at the next meeting of the Society.

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*Stated Meeting, April 2.*

Present, forty-eight members.

Prof. CRESSON, Vice-President, in the Chair.

Letters were read:—

From the Corporation of Yale College, dated New Haven, March 16, 1858;—and from the Lyceum of Natural History, dated New York, March 27, 1858, both acknowledging the receipt of No. 58 of the Proceedings of this Society.

The following donations were announced:—

FOR THE LIBRARY.

Report on the Observatories of his highness the Maha Rajah of Travancore. By John Allan Brown, Director of the Observatories. Trevandrum, 1857. 8vo.—*From the Author.*

Journal of the Royal Astronomical Society. Vol. XVIII. No. 4. Feb. 2, 1858, with Index of Papers. 8vo.—*From the Society.*